

IN THE CLAIMS:

1. (Currently Amended) A friction welding machine comprising:

a frame;

a first headstock, which has a first spindle with a first workpiece holder and with a spindle drive; [[and]]

5 a feed drive with a second workpiece holder;[[,]]

a second headstock with a second spindle, with a spindle drive and with said second workpiece holder, wherein said second headstock is mounted axially movably at said frame and is connected to said feed drive, wherein at least one of said first workpiece holder and said second workpiece holder has a bridge, said bridge receiving a torque and a forge force during friction welding such that at least one of said first spindle and said second spindle does not receive the forge force and the torque produced via the friction welding.

2. (Previously Presented) A friction welding machine in accordance with claim 1, wherein said first headstock is arranged stationarily at said frame.

3. (Previously Presented) A friction welding machine in accordance with claim 1, wherein said spindles have different sizes.

4. (Previously Presented) A friction welding machine in accordance with claim 3, wherein said spindle of said second spindle drive is smaller than said other spindle.

5. (Previously Presented) A friction welding machine in accordance with claim 1, wherein said second spindle drive is weaker than said first spindle drive.

6. (Canceled)

7. (Currently Amended) A friction welding machine in accordance with claim [[6]] 1, wherein a workpiece holder is mounted rigidly at said bridge.

8. (Currently Amended) A friction welding machine in accordance with claim [[6]] 1, wherein said bridge has a carrying body and a positive-locking support for connection to at least one of said first headstock and second headstock.

9. (Previously Presented) A friction welding machine in accordance with claim 8, wherein said positive-locking connection has pins and openings that engage each other at said carrying body and said at least one of said first headstock and second headstock.

10. (Previously Presented) A friction welding machine in accordance with claim 1, wherein at least one said workpiece holder is detachably connected to a spindle.

11. (Previously Presented) A friction welding machine in accordance with claim 6, wherein said spindles and said bridge have said similar workpiece holders.

12. (Previously Presented) A friction welding machine in accordance with claim 1, wherein said second headstock has a traveling carriage, which is mounted and guided in a positive-locking manner at a carriage guide at said frame along a direction of feed.

13. (Previously Presented) A friction welding machine in accordance with claim 1, wherein said feed drive is mounted and supported at a column of said frame.

14. (Previously Presented) A friction welding machine in accordance with claim 13, wherein said column and said stationary headstock are connected by one or more said tie rods.

15. (Previously Presented) A friction welding machine in accordance with claim 1, wherein said feed drive has one or more said cylinders.

16. (Previously Presented) A friction welding machine in accordance with claim 1, wherein said spindle drives have electric drive motors.

17. (Previously Presented) A friction welding machine in accordance with claim 1, wherein at least one said spindle drive has settable flywheel masses.

18. (Previously Presented) A friction welding machine in accordance with claim 1, wherein said stationary spindle drive has one or more additional flywheel masses that can be

coupled.

19. (Currently Amended) A process for operating a friction welding machine, the process comprising:

providing the welding machine with a plurality of headstocks with spindles, spindle drives and workpiece mounts;

5 movably mounting one of said headstocks to provide a movably mounted headstock; providing a feed drive for moving the movably mounted headstock, ; and

providing a bridge connected to one of said head headstocks, wherein one of said spindles is relieved of axial force and welding forces and torque with the bridge during a welding operation.

20. (Previously Presented) A process in accordance with claim 19, wherein said workpiece mount is removed from said spindle that is to be relieved, and said bridge with a workpiece mount attached thereto is placed over said spindle and connected to said headstock by means of a support.

21. (New) A friction welding machine comprising:

a frame;

a first headstock having a first spindle with a first workpiece holder and a first spindle drive, said first spindle drive being mounted on said first headstock;

5                   a feed drive with a second workpiece holder, wherein a portion of said feed drive is in  
contact with said frame;

                  a second headstock having a second spindle drive mounted thereto and a second spindle,  
said feed drive extending through said second headstock such that second workpiece holder is  
located on one side of said second headstock, said second headstock being mounted for  
10 movement such that said second headstock is movable in an axial direction on said frame,  
wherein at least one of said first workpiece holder and said second workpiece holder has a  
bridge connected thereto, said bridge receiving a torque and a forge force during friction  
welding such that at least one of said first spindle and said second spindle does not receive the  
forge force and the torque produced via the friction welding.